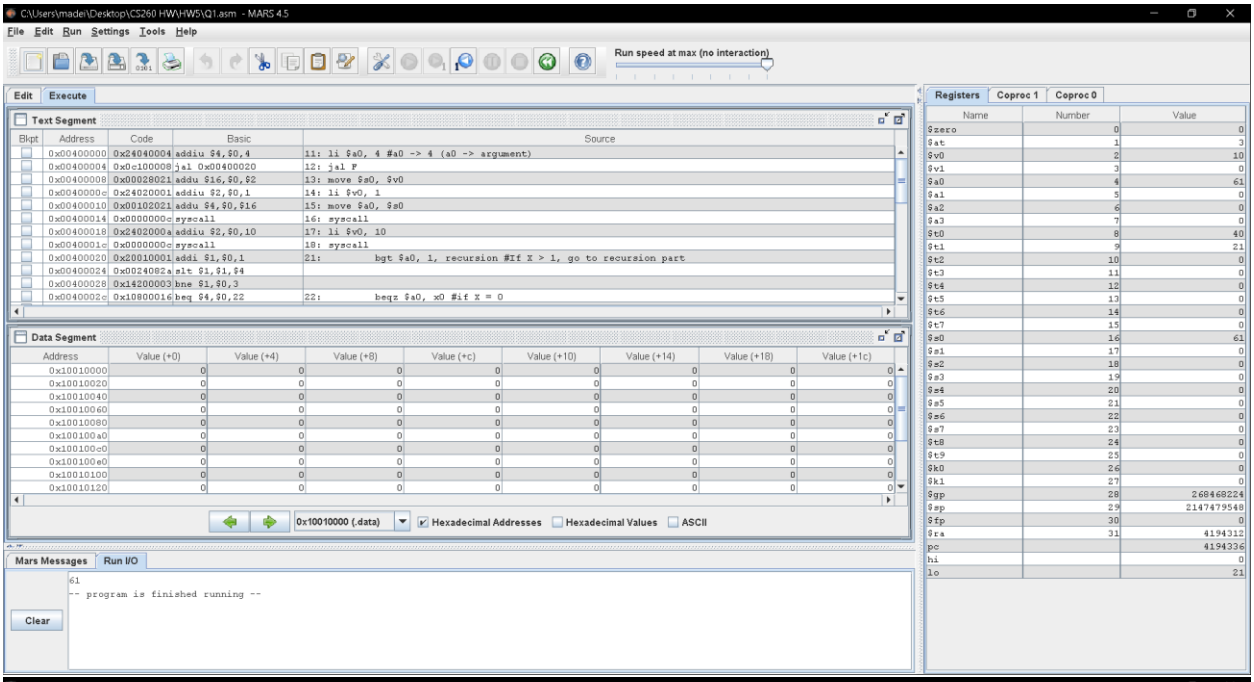
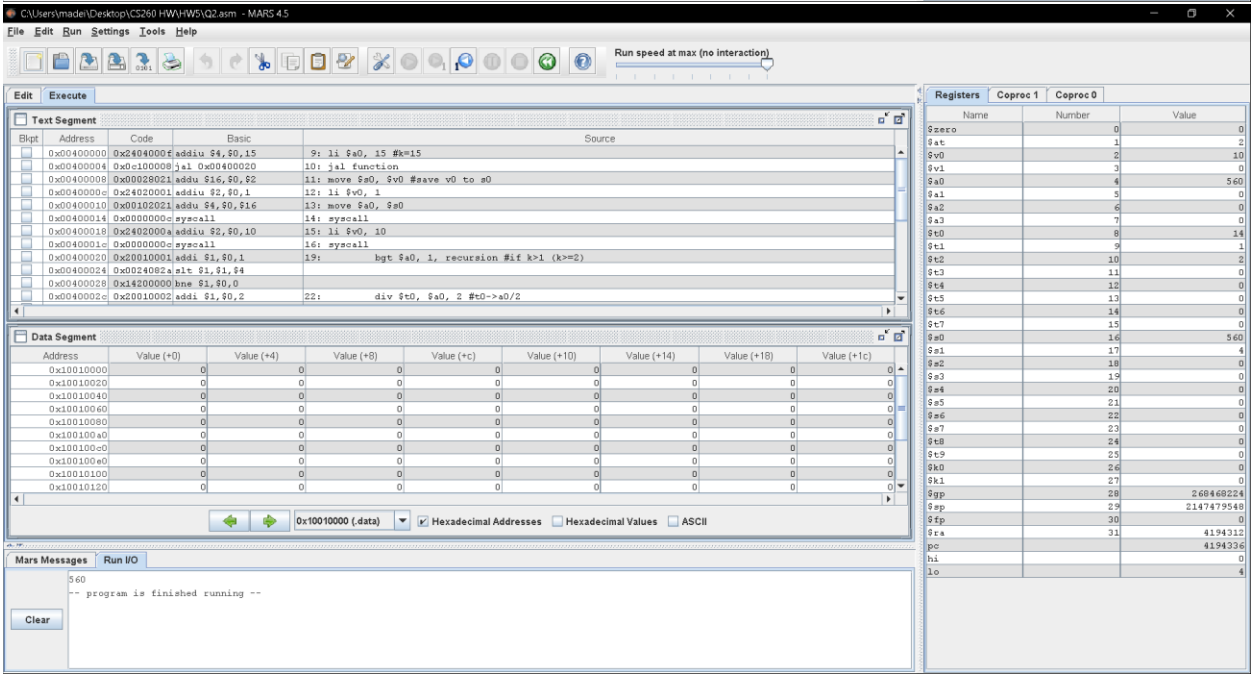
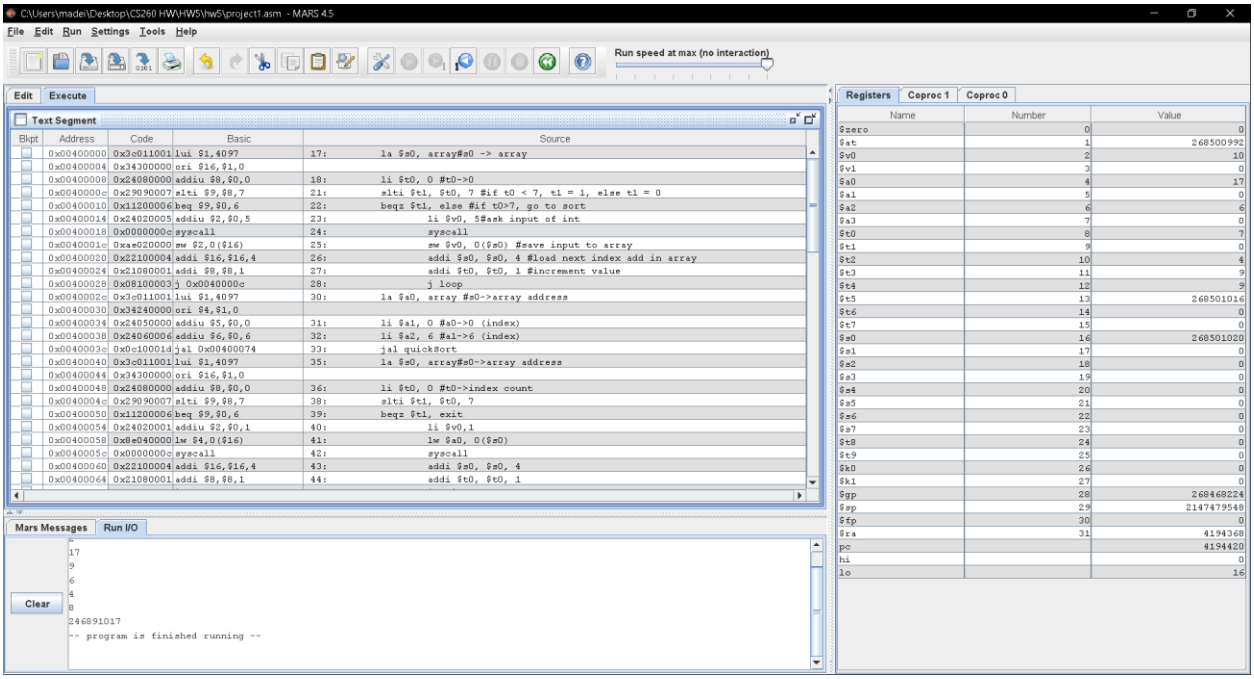
Haorui Zhang

1. 

2. 

3.


C:\Users\madel\Desktop\CS260 HW\HW5\hw5\project1.asm - MARS 4.5
File Edit Run Settings Tools Help
Run speed at max (no interaction)
Edit Execute
Text Segment
Bkpt Address Code Basic Source
0x00400000 0x3c011001 lui $1,4097 17: la $s0, array#s0 -> array
0x00400004 0x34300000 ori $16,$1,0
0x00400008 0x24080000 addiu $8,$0,0 18: li $t0, 0 #t0->0
0x0040000c 0x29090007 slti $9,$8,7 21: slti $t1, $t0, 7 #if t0 < 7, t1 = 1, else t1 = 0
0x00400010 0x11200006 beq $9,$0,6 22: beqz $t1, else #if t0>7, go to sort
0x00400014 0x24020005 addiu $2,$0,5 23: li $v0, 5#ask input of int
0x00400018 0x0000000c syscall 24: syscall
0x0040001c 0xae020000 sw $2,0($16) 25: sw $v0, 0($s0) #save input to array
0x00400020 0x22100004 addi $16,$16,4 26: addi $s0, $s0, 4 #load next index add in array
0x00400024 0x21080001 addi $8,$8,1 27: addi $t0, $t0, 1 #increment value
0x00400028 0x08100003 j 0x0040000c 28: j loop
0x0040002c 0x3c011001 lui $1,4097 30: la $s0, array #s0->array address
0x00400030 0x34240000 ori $4,$1,0
0x00400034 0x24050000 addiu $5,$0,0 31: li $a1, 0 #a0->0 (index)
0x00400038 0x24060006 addiu $6,$0,6 32: li $a2, 6 #a1->6 (index)
0x0040003c 0x0c10001d jal 0x00400074 33: jal quickSort
0x00400040 0x3c011001 lui $1,4097 35: la $s0, array#s0->array address
0x00400044 0x34300000 ori $16,$1,0
0x00400048 0x24080000 addiu $8,$0,0 36: li $t0, 0 #t0->index count
0x0040004c 0x29090007 slti $9,$8,7 38: slti $t1, $t0, 7
0x00400050 0x11200006 beq $9,$0,6 39: beqz $t1, exit
0x00400054 0x24020001 addiu $2,$0,1 40: li $v0,1
0x00400058 0x8e040000 lw $4,0($16) 41: lw $a0, 0($s0)
0x0040005c 0x0000000c syscall 42: syscall
0x00400060 0x22100004 addi $16,$16,4 43: addi $s0, $s0, 4
0x00400064 0x21080001 addi $8,$8,1 44: addi $t0, $t0, 1
Mars Messages Run I/O
Clear
17
9
6
4
0
246891017
-- program is finished running --
Registers Coproc 1 Coproc 0
Name Number Value
$zero 0 0
$at 1 268500992
$v0 2 10
$v1 3 0
$a0 4 17
$a1 5 0
$a2 6 6
$a3 7 0
$t0 8 7
$t1 9 0
$t2 10 4
$t3 11 9
$t4 12 9
$t5 13 268501016
$t6 14 0
$t7 15 0
$s0 16 268501020
$s1 17 0
$s2 18 0
$s3 19 0
$s4 20 0
$s5 21 0
$s6 22 0
$s7 23 0
$t8 24 0
$t9 25 0
$k0 26 0
$k1 27 0
$gp 28 268468224
$sp 29 2147479548
$fp 30 0
$ra 31 4194368
pc 4194420
hi 0
lo 16